

Question 9 - Addendum

For each substance detected in sampling performed at the Property, below is the identity of the study, the investigator, the date of the study, specifically where on the Property and by whom the sampling was performed.

Substance Identified	Report	Report Date	Sampling Date	Location
Trichloroethylene (TCE)	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	See Report
			September 24, 2004 – May 25, 2005	See Report
	Army Corp of Engineers Final Remedial Investigation	September 2010	September 25, 2006	Passive Soil Gas
			September 13, 2006	Sub-slab soil vapor
			Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Soil data was based on the URS 2003 Comprehensive Soil Remediation Program	Soils, Figures 4-1, -2, -3, -4 and -5
			Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Figure 1-2 and Appendix I
			Groundwater samples were collected between	Shallow groundwater only - Figure

			October 2002 and November 2010 and summarized in the report	1-3 and Table 4-2
Tetrachloroethylene (PCE)	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	See Report
			September 24, 2004 – May 25, 2005	See Report
	Army Corp of Engineers Final Remedial Investigation	September 2010	September 25, 2006	Passive Soil Gas
			September 13, 2006	Sub-slab soil vapor
			Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Soil data was based on the URS 2003 Comprehensive Soil Remediation Program	Soils, Figures 4-1, -2, -3, -4 and -5
			Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Figure 1-2 and Appendix I
			Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Shallow groundwater only - Figure 1-3 and Table 4-2

Cis-1,2-dichloroethylene	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in cells 4,7, 9 and 11 and under the 100 Building (Highest detection in soil is 2 J mg/kg)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	September 25, 2006	Passive Soil Gas
			September 13, 2006	Sub-slab soil vapor
			Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
			Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Figure 1-2 and Appendix I
1,1-dichloroethylene	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Shallow groundwater only - Figure 1-3 and Table 4-2
			Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Detected in cells 3,5 and 6

	Report		– May 25, 2005	(Highest detection in soil is 6.8 j mg/kg at 3 ft bgs)
	Army Corp of Engineers Final Remedial Investigation	September 2010	September 25, 2006	Passive Soil Gas
			September 13, 2006	Sub-slab soil vapor
			Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Figure 1-2 and Appendix I
1,1,1-trichloroethane (1, 1, 1-TCA)	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in cells 2,3,5 6, 10, 11 and 12 (Highest detection in soil 9.5 mg/kg at .5 ft bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and	Soil samples – see Tables 4.5-2, -3, and -4

			Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Figure 1-2 and Appendix I
1,4 Dioxane	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Shallow groundwater only - Figure 1-3 and Table 4-2
Carbon Tetrachloride	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in cells 3,5 ,6, 10, 11 (Highest detection in soil 36 mg/kg at 3 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	September 13, 2006	Sub-slab soil vapor

			Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
Chlorobenzene	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in cells 2, 4, 6, 9, 10, 11, 12, 15 (Highest detection in soil 15 j mg/kg at 2 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Shallow groundwater only - Figure 1-3 and Table 4-2
Benzene	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in cells 8, 9, 10, 11, and 14 (Highest detection .55 mg/kg at 6 feet bgs).
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	September 25, 2006	Passive Soil Gas
			Data collected by	Soil samples –

			the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	see Tables 4.5-2, -3, and -4
1,2 – dichlorobenzene	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	See Report
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
Methyl ethyl ketone (2-butanone)	Army Corp of Engineers Final Remedial Investigation	September 2010	September 13, 2006	Sub-slab soil vapor
			Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
Chromium	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 6, 9 and 10 (Highest detection in soil 298 j mg/kg at 16 ft bgs)
			September 24, 2004	

			– May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
Vinyl Chloride	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Only in one sample, Cell 9, Sub-cell G20, 39 feet bgs (.41 mg/kg).
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	September 25, 2006	Passive Soil Gas
			Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
Arsenic	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 9 and 10
				(Highest detection in soil 1.4 mg/kg at 6 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and	Soil samples – see Tables 4.5-

			GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	2, -3, and -4
Barium	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 9 and 10 (Highest detection in soil 108 mg/kg at 17 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
Cadmium	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 2 and 9 (Highest detection in soil 4.7 j mg/kg at 7 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final	September	Data collected by	Soil samples –

	Remedial Investigation	2010	the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
Chloride	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Only in one sample, Cell 9, Sub-cell G20, 7 feet bgs (474 j mg/kg).
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Figure 1-2 and Appendix I

Copper	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 2,6, 9 and 10 (Highest detection in soil 748 j mg/kg at 16 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
Ferrous Iron and Total Iron	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	See Report
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4

			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Groundwater samples were collected between October 2002 and November 2010 and summarized in the report	Figure 1-2 and Appendix I
Lead	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 6, 9 and 10 (Highest detection in soil 68.2 j mg/kg at 16 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
Manganese	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 6, 9 and 10

				(Highest detection in soil 2950 j mg/kg at 17 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
Mercury	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 9 and 10 (Highest detection in soil 5.4 j mg/kg at 16 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4

Nickel	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	In Cell 9, Sub-cell H20, 20-43 feet bgs (highest detection 180 mg/kg)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Soil data was based on the URS 2003 Comprehensive Soil Remediation Program	Soils, Figures 4-1, -2, -3, -4 and -5
Beryllium	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 2 and 9 (Highest detection in soil .28 j mg/kg at 5 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations	Soil samples – see Tables 4.5-2, -3, and -4

			conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	
			The on-site RI groundwater investigation was conducted in two phases (Phase IIIa in 2008/2009 and Phase IIIb 2009/2010)	Groundwater Monitoring Wells, Tables 4.7, 4.8 and 4.9 (shallow wells only)
Radionuclides Uranium and Thorium	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	See Report
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	Soil samples – see Tables 4.5-2, -3, and -4
	Malcolm Pirnie Groundwater Remedial Investigation Report	January 2011	Soil data was based on the URS 2003 Comprehensive Soil Remediation Program	Soils, Figures 4-1, -2, -3, -4 and -5
Zinc	Investigator during time period was URS Corporation; results listed in the Phase I Soil Remediation Database Report	July 2007	April 23, 2003 – September 23, 2004	Detected in soil in Cells 9 and 10 (Highest detection in soil 38.1 jj mg/kg at 4 feet bgs)
			September 24, 2004 – May 25, 2005	
	Army Corp of Engineers Final Remedial Investigation	September 2010	Data collected by the USACE and GTEOSI during its Phase I Remediation and Supplemental	Soil samples – see Tables 4.5-2, -3, and -4

			Investigations conducted from 2003 through 2005 (GTEOSI 2007a, 2007b)	
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NOTES:

1. Profilers Considered to be Onsite:
 - P-1 to P-12
 - P-24 and P-25
 - P-35
 - P-103
 - P-107 and P-108
 - P-D
2. Monitoring Wells Considered to be Onsite– shallow:
 - MW-03 and MW-04
 - MW-08 to MW-25
 - MW-27 to MW-30
 - MW-39
 - MW-41
 - MW-43 and MW-44
 - MW-49
3. TCE, cis-1,2-DCE, and vinyl chloride are the products of anaerobic biodegradation of PCE.
4. All VOC detects are at low concentrations except PCE.
5. Most VOC detects are of a very low percentage of the total number of samples analyzed.
6. The radionuclides in soil were removed, and the ACOE is remediating the site after the soil removal.
7. The 1,1,1-TCA and 1,1-DCE are not in the shallow groundwater; thus, their source is upgradient.
8. 1,1-DCE is the hydrolysis product of water-soluble 1,1,1-TCA (abiotic degradation).